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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/977,269	10/12/2001	Oscar Salonaho	930.340USW1	2266

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EXAMINER
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MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/22/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

09/977,269

Applicant(s)

SALONAHU ET AL

Examiner

Naghmeh Mehrpour

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2006.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. **Claims 1-13, 15-42**, are rejected under 35 U.S.C. 102(e) as being anticipated by Soliman III et al. (Patent Number 6,356,531).

Regarding claim 1, Soliman teaches a method of controlling the power with which a mobile station transmits to a base station, comprising the step of:

transmitting from the **base** station to the **mobile** station a power control command having a given value (col 4 lines 18-60);

receiving said power control command at said mobile station (col 4 lines 18-60);

determining from said received power control command a parameter representative of the quality with which the power control command is received at the mobile station (col 4 lines 18-60), and

controlling the power at which the mobile station transmits signals based on the determination step (col 4 lines 18-60).

Regarding claim 2, Soliman teaches a method wherein in the determining step, the received value of said received power control command is determined as said parameter (col 4 lines 18-60).

Regarding claim 3, Soliman teaches a method as claimed in claim 2, **wherein the power control command signal as generated is indicative of a power control command having a given value**, and further comprising the steps of comparing said determined received value with a threshold value (col 7 lines 7-61);

determining the given value which was transmitted based on the comparing step 5 lines 3-65);

and

in the controlling step controlling the power which the mobile station transmits signals based on the determined transmitted value (col 5 lines 14-65)

Regarding claim 4, Soliman teaches a method wherein the **mobile** station is arranged to transmit signals to plurality of **base** stations, each of the **base** stations transmitting a power control commands to the mobile station (col 7 lines 5-40).

Regarding claim 5, Soliman teaches a method wherein the method further comprises the step of selecting one of the determined transmitted values in accordance with a predetermined criteria (col 7 lines 40-60).

Regarding claim 6, Soliman teaches a method wherein the transmitted power control command comprises one of a mobile value indicating that the power should be increased and a base value indicating the power should be decreased (col 6 lines 35-67, col 7 lines 1-40).

Regarding claim 7, Soliman teaches a method wherein the predetermined criteria is to select value if at least one of the determined transmitted values is the base value (col 7 lines 1-60).

Regarding claim 8, Soliman teaches a method wherein the predetermined criteria is to select the mobile value if all the determined transmitted values are the mobile value (col 7 lines 1-60).

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Regarding claim 9, Soliman teaches a method wherein the threshold value is between the possible received values representative of the transmitted mobile and base values (col 4 lines 45-67).

Regarding claim 10, Soliman teaches a method wherein the threshold value is such that one of transmitted power command value is favored over the other (col 7 lines 1-40).

Regarding claim 11, Soliman teaches a method wherein the mobile value is favored over the base value (col 7 lines 1-60).

Regarding claim 12, Soliman teaches a method wherein the mobile value is +1 and the base value is -1 (col 4 lines 31-67).

Regarding claim 13, Soliman teaches a method wherein the threshold value is in the range -.6 to 0 (col 4 lines 31-67).

Regarding claim 15, Soliman teaches a method as claimed in any preceding claim, further comprising the steps of :

receiving at the base station a signal from said mobile station, determining the strength of the received signal from the mobile station and determining from the

strength of the received signal the power control command transmitted to the mobile station (col 4 lines 32-67, col 5 lines 1-65).

Regarding claim 16, Soliman teaches a method as claimed in claim 5 or any claim appended thereto, said method comprising the steps of:

combining the received values of said received power control commands (col 4 lines 32-67, col 5 lines 1-65),

comparing the combined value and the selected value and on the basis of the comparison selecting one of said combined value and the selected value and controlling the power which the mobile station transmits in accordance therewith (col 6 lines 10-67).

Regarding claim 17, Soliman teaches a method as claimed in claim 16 when appended to claim 6, wherein the one of the combined value and the selected value which is closer to representing a predetermined one of said mobile and base transmitted values is selected (col 7 lines 1-60).

Regarding claim 18, Soliman teaches a method as claimed in claim 17, wherein said predetermined one of said values is the base value (col 7 lines 1-60).

Regarding claim 19, Soliman teaches a method as claimed in any one of the preceding claims when appended to claim 2, comprising the steps of:

outputting a value based on a currently received power control command value and at least one previously received power control value (col 7 lines 1-67); and comparing said output value and the selected value and on the basis of the comparison selecting one of said output value and the selected value and controlling the power which the mobile station transmits in accordance therewith (col 8 lines 1-52).

Regarding claim 20, Soliman teaches a method as claimed in claim 19, comprising the steps of: summing the currently received power control value with the at least one previously received power control command value (col 4 lines 32-67);

comparing the summed value with a predetermined threshold (col 5 lines 1-67);

outputting the determined received value or if a threshold of the summed value is crossed outputting a default value (col 6 lines 1-67).

Regarding claim 21, Soliman teaches a method as claimed in claim 20, wherein the mobile station is arranged to transmit signals to a plurality of base stations, each of which base stations is arranged to transmit power control commands to said mobile station, said method further comprising the steps of:

determining the values of each of said received power control values and selecting one of said determined received values, in accordance with a predetermined criteria, to be summed with the at least one previously received power control values (col 4 lines 18-67, col 5 lines 1-65).



Regarding claim 22, Soliman teaches a method as claimed in any preceding claim, wherein said base station is a base station (col 4 lines 18-60).

Regarding claim 23, Soliman teaches a method wherein said mobile station is a mobile station (col 4 lines 18-60).

Regarding claim 24, Soliman teaches a method of controlling the power with which a mobile station transmits signals to a plurality of base stations, comprising the steps of:

transmitting from each of the base stations to the mobile station a power control command having a given value (col 4 lines 18-60);

receiving said power control commands at said mobile station (col 4 lines 18-67);

determining the received values of said received power control commands (col 4 lines 60-67, col 5 lines 1-67);

combining the received values of said received power control commands; and

controlling the power with which mobile station transmits to the base station based on said combined value (col 6 lines 1-67).

Regarding claim 25, Soliman teaches a method as claimed in claim 24, wherein said transmitted power control command **signals as generated are each indicative of a power control having value which** comprises **either** a first value indicating that the power should be increased and a base value indicating that the power should be decreased, and if the combined value exceeds a given threshold, the power with which

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the mobile station transmits to base station is one of increased or decreased and if the combined value is below the given threshold, the power with which the mobile station transmits to the base station is the other of increased or decreased (col 4 lines 18-67, col 5 lines 1-60).

Regarding claim 26, Soliman teaches a method of controlling the power with which a mobile station transmits signals to a base station, comprising the steps of:

transmitting from the base station to the mobile station a plurality of power control commands (col 4 lines 18-60);

**receiving** said power control commands at said mobile station (col 4 lines 60-67, col 5 lines 1-67);

determining the **received** value of said received power control **signals** (col 6 lines 1-67);

**determining whether to increase or decrease** the power with which the **mobile** station transmits to the base station based on a currently received power control command **signal** and at least one **received value for at least one** previously received power control command **signal** (col 7 lines 1-67, col 8 lines 1-52).

Regarding claim 27, Soliman teaches a method as claimed in claim 26, comprising the steps of summing the determined value of the currently received power control

command with a previously determined value of at least one previously received power control command (col 4 lines 18-60);

comparing the summed values with a predetermined threshold (col 7 lines 5-60);

**determining whether to increase or decrease** controlling the power with which the mobile station transmits to the base station depending on whether or not the threshold is crossed and the determined value of the currently received power control value (col 7 lines 5-60).

Regarding claim 28, Soliman teaches a method wherein the mobile station is arranged to transmit signals to a plurality of base stations, each of which base stations is arranged to **receive** power control commands **signals from each of the** to said **base** station, said method further comprising the steps of:

determining the values of each of said received power control values and selecting one of said determined values in accordance with a predetermined criteria as the current received value (col 4 lines 18-60).

Regarding claim 29, Soliman teaches a method as claimed in claim 28, wherein said power control command signals as generated are each indicative of a power control command having a given value comprising either a first value indicating that the power should be increased or a base value indicating that the power should be decreased, and **wherein** the predetermined criteria is to select the received value closer to the base value (col 4 lines 60-67, col 5 lines 1-65).

Regarding claim 30, Soliman teaches a method wherein if the summed value crosses the threshold and the determined value of the received power is determined to represent a power increase, the power with which the mobile station transmits to base station is decreased (col 6 lines 1-67).

Regarding claim 31, Soliman teaches a method wherein if the summed value crosses the threshold and the determined value of the received power is determined to be represent a power increase, the power with which the mobile station transmits to base station is decreased and the summed value becomes reset value (col 4 lines 32-67, col 5 lines 1-67, col 6 lines 1-67).

Regarding claim 32, Soliman teaches a method for controlling the power which a mobile station transmits signals to a base station comprising the steps of:

- transmitting from the base station to the mobile station a power control command (col 4 lines 32-60);

- receiving said tower control command at the mobile station (col 4 lines 60-67);

- determining, using a plurality of different methods, power control information from said received power control command (col 5 lines 1-67, col 6 lines 1-67); and

- controlling the power with which the mobile station transmits to the base station based on the determination step (col 6 lines 1-67).

Regarding claim 33, Soliman teaches a method as claimed in claim 32, wherein the power control information obtained from one of said plurality of different methods is used to control the power with which the mobile station transmits to the base station (col 4 lines 32-67, col 5 lines 1-67, col 6 lines 1-67).

Regarding claim 34, Soliman teaches a method wherein one of said plurality of different methods comprises the steps of determining from the received power control command a parameter representative of the quality with which the power control command is received at the mobile station, said parameter defining said power control information (col 4 lines 32-60).

Regarding claim 35, Soliman teaches a method wherein one of said plurality of different methods comprises the steps of determining the received values of a plurality of power control commands received at said mobile station from a plurality of base stations, combining the received values of the received power control commands to define said power control information (col 4 lines 18-60).

Regarding claim 36, Soliman teaches a method wherein one of said plurality of different methods comprises the steps of determining the received values of a plurality of power control commands received at said mobile station from said base station, providing power control information based the currently received power control

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command and at least one previously received power control command (col 4 lines 18-60).

Regarding claim 37, Soliman teaches a mobile station which in use transmits signals to a base station, said mobile station comprising:

means for receiving a power control command transmitted from said base station to said mobile station, said power control command being transmitted with a given value (col 4 lines 18-60);

determining means for determining from said received power control command a parameter representative of the quality with which the power control command is received at the mobile station (col 5 lines 1-67, col 6 lines 1-67); and

control means for controlling the power which the mobile station transmits signals based on the determination carried out by said determining means (col 7 lines 1-67, col 8 lines 1-52).

Regarding claim 38, Soliman teaches a mobile station which in use transmits signals to a plurality of base stations, said mobile station comprising:

means for receiving power control commands transmitted from said base stations to said mobile station, said power control commands being transmitted with a given values (col 4 lines 18-60);

means for determining the received values of said received power control commands (col 4 lines 18-60);

means for combining the received values of said received power control commands (col 4 lines 18-60); and

means for controlling the power with which mobile station transmits to the base station based on said combined value (col 4 lines 18-60).

Regarding claim 39, Soliman teaches a mobile station which in use transmits signals to a base station, said mobile station comprising:

means for receiving power control commands transmitted from said base station to said mobile station (col 4 lines 18-60)

means for determining the values of said received power control values (col 4 lines 18-60):

means for controlling the power with which the mobile station transmits to the base station based on a currently received power control command and at least one previously received power control command (col 4 lines 18-60).

Regarding claim 40, Soliman teaches a mobile station which is use transmits signals to one or more base stations, the mobile station comprising:

means for receiving power control commands fro the one or more base stations (col 4 lines 18-60); and

a device according to claim 37.

Regarding claim 41, Soliman teaches a method of controlling the power with which a mobile station transmits signals to a base station comprising the steps of:

receiving from the base station at the mobile station a power control command (col 4 lines 18-60);

determining the received value of the received power control command, the received value representing the quality with the which the power control command is received at the mobile station (col 4 lines 18-60); and

deciding whether to increase or decrease the power at which the mobile station transmits signals on the basis of the result of the determination step (col 4 lines 60-67, col 5 lines 1-67).

Regarding claim 42, Soliman teaches a device for a mobile station which in user transmits signals to a base station, the device comprising:

a controller for determining a received value of a power control command received from the base station, the received value representing the quality with which the power control command is received at the mobile station (col 4 lines 18-67); and

deciding whether to increase or decrease the power at which the mobile station transmits signals on the basis of the result of the determination (col 5 lines 1-67).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:



(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 14**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Soliman et al. (US patent 6,808,041).

Regarding claim 14, Soliman fails to teach a method as claimed in claim 13, wherein the threshold value is in the range -0.025 and -0.30. However, Examiner takes official notice that a method of claim 13 wherein the threshold value is in the range -0.025 and -0.30 is a design choice. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to combine the above teaching with Soliman, in order to enable to control the performance of the system more precisely.

### ***Response to Arguments***

3. Applicant's arguments with respect to claims 1-42 have been considered but are moot in view of the new ground(s) of rejection.

### **Conclusion**

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

**5. Any responses to this action should be mailed to:**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Naghmeh Mehrpour whose telephone number is 571-272-7913. The examiner can normally be reached on 8:00- 6:00.

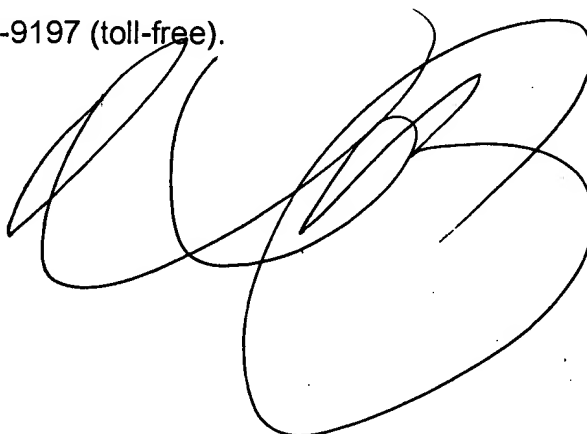
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold be reached (571) 272-7905.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

NM

December 18, 2006

A large, stylized handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke at the bottom.